1. Solve the equation below. Then, choose the interval that contains the solution.

$$-12(7x + 16) = -8(19x - 10)$$

A. $x \in [1.3, 2.6]$

B. $x \in [2.8, 4.9]$

C. $x \in [-2, -1.3]$

D. $x \in [-1.1, 1.2]$

E. There are no real solutions.

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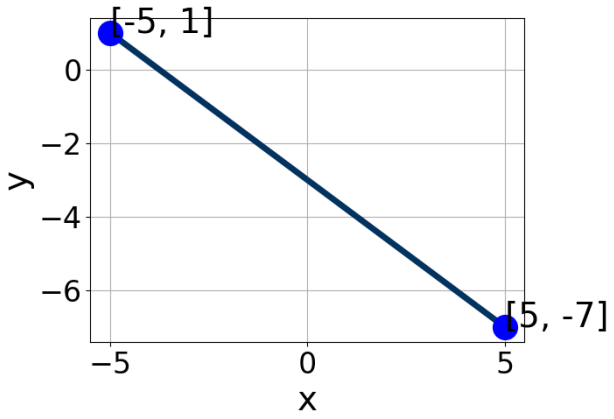
2. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.



A. $A \in [-6.2, -3.8]$, $B \in [-6.6, -4]$, and $C \in [14, 17]$

B. $A \in [1.8, 4.5]$, $B \in [3.4, 5.6]$, and $C \in [-15, -14]$

C. $A \in [-1.7, 3.2]$, $B \in [-3.6, -0.6]$, and $C \in [1, 7]$

D. $A \in [1.8, 4.5]$, $B \in [-6.6, -4]$, and $C \in [14, 17]$

E. $A \in [-1.7, 3.2]$, $B \in [0.5, 2]$, and $C \in [-7, 0]$

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3. Solve the equation below. Then, choose the interval that contains the solution.

$$-11(-6x - 15) = -16(13x - 8)$$

A. $x \in [1.86, 2.31]$

B. $x \in [-0.16, 0.17]$

C. $x \in [-1.34, -0.84]$

D. $x \in [0.74, 1.35]$

E. There are no real solutions.

---

4. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x-7}{4} - \frac{-7x+3}{5} = \frac{5x-4}{2}$$

A. $x \in [1.4, 3.3]$

B. $x \in [-5.7, -5.3]$

C. $x \in [37.3, 40.8]$

D. $x \in [-0.6, 0.6]$

E. There are no real solutions.

---

5. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

$$(8, 7) \text{ and } (-4, -8)$$

A. $m \in [-4.2, -0.9]$ $b \in [-13.99, -12.84]$

B. $m \in [-0.7, 3.4]$ $b \in [-5.93, -3.61]$

C. $m \in [-0.7, 3.4]$ $b \in [1.04, 3.61]$

D. $m \in [-0.7, 3.4]$ $b \in [-1.64, 0.07]$

E. $m \in [-0.7, 3.4]$ $b \in [-3.33, -2.61]$

---

6. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

   Parallel to $6x - 5y = 7$ and passing through the point $(9, 3)$.

   A. $m \in [1.14, 1.5]$ $b \in [-10.2, -6.2]$

   B. $m \in [0.54, 1.14]$ $b \in [-10.2, -6.2]$

   C. $m \in [1.14, 1.5]$ $b \in [-6.9, -5.9]$

   D. $m \in [-1.23, -0.79]$ $b \in [13.5, 15.2]$

   E. $m \in [1.14, 1.5]$ $b \in [6.6, 8.7]$

---

7. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x - 6}{5} - \frac{8x + 3}{4} = \frac{-9x + 5}{7}$$

   A. $x \in [47, 53]$

   B. $x \in [7.32, 11.32]$

   C. $x \in [0.44, 3.44]$

   D. $x \in [3.07, 6.07]$

   E. There are no real solutions.

---

8. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

   $(-6, 10)$ and $(-11, -10)$

   A. $m \in [1, 12]$ $b \in [-38, -33]$

   B. $m \in [1, 12]$ $b \in [32, 38]$

   C. $m \in [1, 12]$ $b \in [15, 18]$

   D. $m \in [-7, -2]$ $b \in [-54, -48]$

E. $m \in [1, 12]$ $b \in [-4, 6]$

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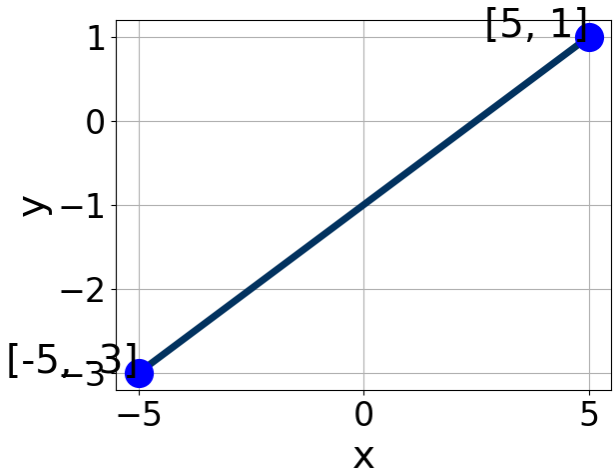
9. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.



A. $A \in [-1.6, 0.3]$, $B \in [0.5, 1.4]$, and $C \in [-2.3, 0.75]$

B. $A \in [-1.6, 0.3]$, $B \in [-3.1, 0.8]$, and $C \in [0.97, 1.79]$

C. $A \in [1, 2.5]$, $B \in [4.4, 5.7]$, and $C \in [-5.13, -4.33]$

D. $A \in [-3.9, -1.4]$, $B \in [4.4, 5.7]$, and $C \in [-5.13, -4.33]$

E. $A \in [1, 2.5]$, $B \in [-6.2, -4.9]$, and $C \in [3.89, 6.19]$

---

10. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

Parallel to $4x + 3y = 3$ and passing through the point $(8, -5)$.

A. $m \in [-1.67, -0.87]$ $b \in [-14, -7]$

B. $m \in [-1.67, -0.87]$ $b \in [-5.67, -2.67]$

C. $m \in [1.1, 1.75]$ $b \in [-20.67, -13.67]$

D. $m \in [-0.95, -0.37]$ $b \in [2.67, 6.67]$

E. $m \in [-1.67, -0.87]$ $b \in [2.67, 6.67]$

11. Solve the equation below. Then, choose the interval that contains the solution.

$$-4(-10x - 16) = -18(-12x - 17)$$

A. $x \in [-1.52, -1.43]$

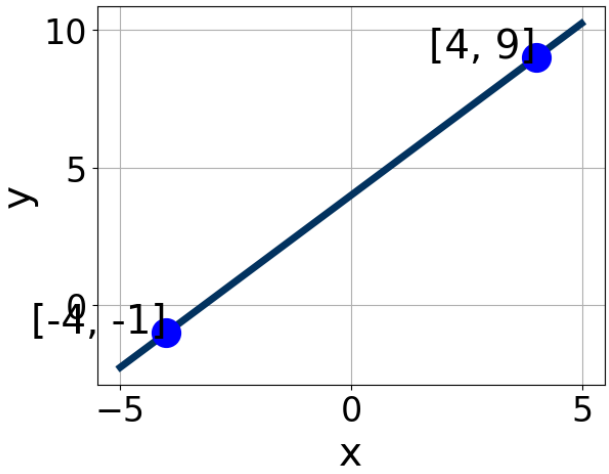
B. $x \in [-2.22, -2.09]$

C. $x \in [2.08, 2.11]$

D. $x \in [-1.44, -1.35]$

E. There are no real solutions.

12. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.



A. $A \in [-1.25, 0.75]$, $B \in [-0.2, 2.4]$, and $C \in [3, 8]$

B. $A \in [-8, -4]$, $B \in [2.7, 5.5]$, and $C \in [11, 22]$

C. $A \in [1, 6]$, $B \in [2.7, 5.5]$, and $C \in [11, 22]$

D. $A \in [-1.25, 0.75]$, $B \in [-2.5, -0.3]$, and $C \in [-12, 0]$

E. $A \in [1, 6]$, $B \in [-4.5, -1.8]$, and $C \in [-18, -14]$

13. Solve the equation below. Then, choose the interval that contains the solution.

$$-7(-15x - 6) = -10(14x - 12)$$

A. $x \in [4.03, 4.99]$

B. $x \in [0.33, 1.74]$

C. $x \in [0.15, 0.49]$

D. $x \in [-1.36, 0.03]$

E. There are no real solutions.

---

14. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x + 9}{3} - \frac{3x + 5}{4} = \frac{-3x - 7}{7}$$

A. $x \in [-3.5, -1.6]$

B. $x \in [-8.5, -6.2]$

C. $x \in [-4.3, -2.9]$

D. $x \in [-0.8, 0.5]$

E. There are no real solutions.

---

15. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

$$(8, -11) \text{ and } (-8, 2)$$

A. $m \in [-3.4, 0.6]$ $b \in [9.3, 13]$

B. $m \in [-3.4, 0.6]$ $b \in [-20.9, -17.2]$

C. $m \in [-0.2, 1.5]$ $b \in [8.1, 9.3]$

D. $m \in [-3.4, 0.6]$ $b \in [-5.4, -3.6]$

E. $m \in [-3.4, 0.6]$ $b \in [3.1, 6.9]$

16. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

    Perpendicular to $7x+3y = 6$ and passing through the point $(-7, -10)$.

    A. $m \in [-1.46, 0.06]$ $b \in [-14, -9]$

    B. $m \in [2.21, 2.76]$ $b \in [-9, -6]$

    C. $m \in [-0.33, 0.86]$ $b \in [3, 12]$

    D. $m \in [-0.33, 0.86]$ $b \in [-4, -1]$

    E. $m \in [-0.33, 0.86]$ $b \in [-9, -6]$

17. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{7x+5}{7} - \frac{3x-5}{2} = \frac{-6x+4}{3}$$

    A. $x \in [-0.83, 0.28]$

    B. $x \in [-4.45, -3.37]$

    C. $x \in [-1.47, -0.74]$

    D. $x \in [1.6, 2.53]$

    E. There are no real solutions.

18. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

$$(3, -8) \text{ and } (-11, -9)$$

    A. $m \in [-0.02, 0.13]$ $b \in [1, 4.9]$

    B. $m \in [-0.33, -0.03]$ $b \in [-10, -8.8]$

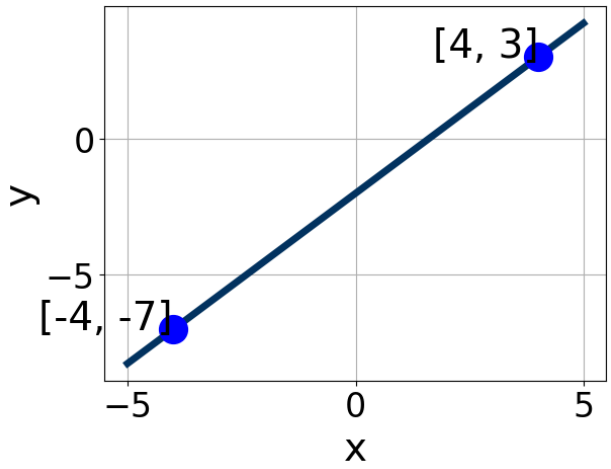
    C. $m \in [-0.02, 0.13]$ $b \in [-12.8, -9.8]$

D. $m \in [-0.02, 0.13]$ $b \in [6.8, 11.1]$

E. $m \in [-0.02, 0.13]$ $b \in [-8.5, -7.6]$

---

19. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.



A. $A \in [4.7, 7.3]$, $B \in [-6.8, -1.8]$, and $C \in [6, 11]$

B. $A \in [-6, -2.5]$, $B \in [1.9, 4.5]$, and $C \in [-12, -6]$

C. $A \in [-1.4, -0.9]$, $B \in [-0.7, 3]$, and $C \in [-4, 1]$

D. $A \in [4.7, 7.3]$, $B \in [1.9, 4.5]$, and $C \in [-12, -6]$

E. $A \in [-1.4, -0.9]$, $B \in [-3.4, -0.2]$, and $C \in [2, 5]$

---

20. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

Parallel to $8x - 3y = 8$ and passing through the point $(8, -5)$.

A. $m \in [-1.4, 2.2]$ $b \in [-28.33, -20.33]$

B. $m \in [1.8, 3.7]$ $b \in [-14, -9]$

C. $m \in [1.8, 3.7]$ $b \in [24.33, 27.33]$

D. $m \in [-3, -0.6]$ $b \in [14.33, 21.33]$

E. $m \in [1.8, 3.7]$ $b \in [-28.33, -20.33]$

---

21. Solve the equation below. Then, choose the interval that contains the solution.

$$-7(-12x + 16) = -11(-18x + 10)$$

A. $x \in [-1.11, 0.07]$

B. $x \in [1.75, 2.12]$

C. $x \in [0.51, 1.13]$

D. $x \in [-2.42, -1.94]$

E. There are no real solutions.

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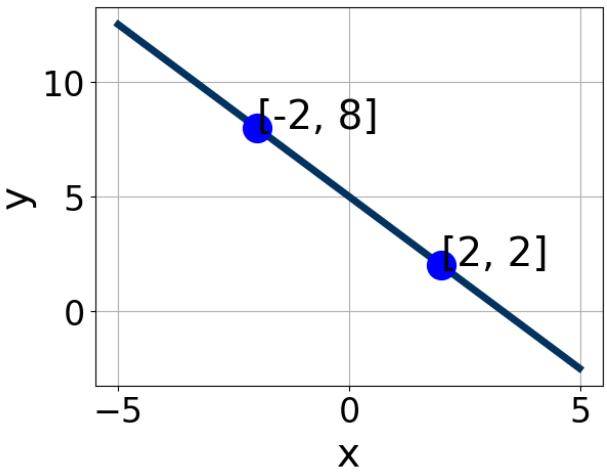
22. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.



A. $A \in [2.19, 3.42]$, $B \in [-2.33, -1.88]$, and $C \in [-10, -7]$

B. $A \in [-3.05, -2.74]$, $B \in [-2.33, -1.88]$, and $C \in [-10, -7]$

C. $A \in [1.38, 1.84]$, $B \in [-1.72, -0.83]$, and $C \in [-8, -1]$

D. $A \in [1.38, 1.84]$, $B \in [0.74, 1.51]$, and $C \in [0, 8]$

E. $A \in [2.19, 3.42]$, $B \in [1.77, 2.43]$, and $C \in [10, 12]$

---

23. Solve the equation below. Then, choose the interval that contains the solution.

$$-8(-7x - 19) = -4(-14x + 9)$$

A. $x \in [-0.3, 0.5]$

B. $x \in [-1.4, -0.4]$

C. $x \in [-0.3, 0.5]$

D. $x \in [-0.3, 0.5]$

E. There are no real solutions.

---

24. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-7x - 4}{6} - \frac{-3x - 9}{2} = \frac{-9x - 5}{8}$$

A. $x \in [-8.7, -6.2]$

B. $x \in [-3.8, -1.8]$

C. $x \in [1.8, 3.5]$

D. $x \in [-1.1, -0.6]$

E. There are no real solutions.

---

25. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

$$(2, 5) \text{ and } (-2, 10)$$

A. $m \in [-1.7, -0.9]$ $b \in [7.2, 8.2]$

B. $m \in [-1.7, -0.9]$ $b \in [2.1, 5.2]$

C. $m \in [-1.7, -0.9]$ $b \in [10, 12.1]$

D. $m \in [-1.7, -0.9]$ $b \in [-10, -6]$

E. $m \in [-0.4, 2.5]$ $b \in [12.3, 16.7]$

26. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

Parallel to $3x - 7y = 13$ and passing through the point $(-5, 6)$.

A. $m \in [-0.11, 2.33]$ $b \in [11, 15]$

B. $m \in [-0.11, 2.33]$ $b \in [7.14, 10.14]$

C. $m \in [2.01, 2.58]$ $b \in [7.14, 10.14]$

D. $m \in [-0.11, 2.33]$ $b \in [-12.14, -6.14]$

E. $m \in [-0.52, 0.19]$ $b \in [-3.14, 5.86]$

27. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{9x + 7}{6} - \frac{-3x + 4}{5} = \frac{6x + 5}{3}$$

A. $x \in [-0.78, 4.22]$

B. $x \in [12, 15]$

C. $x \in [-3, -2]$

D. $x \in [19, 26]$

E. There are no real solutions.

28. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

$$(-4, -3) \text{ and } (-11, -9)$$

A. $m \in [-2.37, 0.6]$ $b \in [-20.1, -18]$

B. $m \in [0.58, 2.01]$ $b \in [-1.51, -0.35]$

C. $m \in [0.58, 2.01]$ $b \in [1.45, 2.02]$

D. $m \in [0.58, 2.01]$ $b \in [0.67, 1.58]$

E. $m \in [0.58, 2.01]$ $b \in [-0.22, 0.91]$

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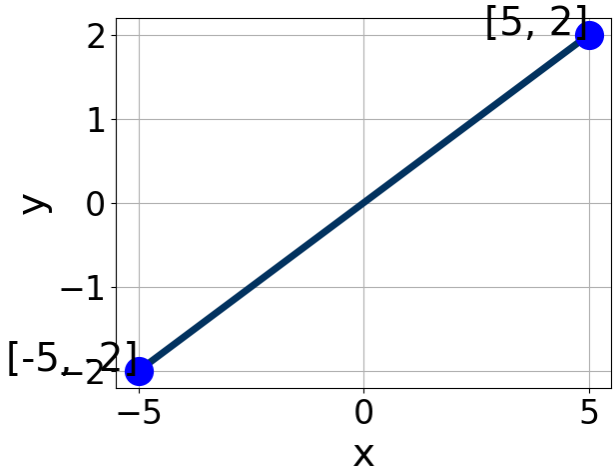
29. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.



A. $A \in [-1.2, 0.4]$, $B \in [0.08, 1.32]$, and $C \in [-1, 5]$

B. $A \in [1.8, 3.9]$, $B \in [-5.9, -3.95]$, and $C \in [-1, 5]$

C. $A \in [1.8, 3.9]$, $B \in [3.04, 5.46]$, and $C \in [-1, 5]$

D. $A \in [-1.2, 0.4]$, $B \in [-1.68, -0.26]$, and $C \in [-1, 5]$

E. $A \in [-2.8, -0.5]$, $B \in [3.04, 5.46]$, and $C \in [-1, 5]$

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30. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

Parallel to $3x + 5y = 8$ and passing through the point $(9, -7)$.

A. $m \in [-2.89, -0.85]$ $b \in [-4.4, -0.3]$

B. $m \in [-1.24, -0.43]$ $b \in [-4.4, -0.3]$

C. $m \in [-1.24, -0.43]$ $b \in [0.6, 3.5]$

D. $m \in [-1.24, -0.43]$ $b \in [-16.6, -15.7]$

E. $m \in [-0.11, 1.28]$ $b \in [-12.5, -11.9]$
